

**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33**

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated.
Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or feet RVR.

<u>AIRPORT</u> GREATER BINGHAMTON/EDWIN A LINK FIELD	<u>AIRPORT ID</u> KBGM	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 16	<u>ORIGINAL/AMENDMENT</u> 2	<u>CITY</u> BINGHAMTON	<u>STATE</u> NY
<u>AIRPORT ELEVATION</u> 1636	<u>TDZE</u> 1634	<u>SUPERSEDED</u> RNAV (GPS) RWY 16	<u>ORIGINAL/AMENDMENT</u> 1	<u>DATED</u> 02/11/2010	<u>MAG VAR</u> 12W
<u>EPOCH YEAR</u> 1995	<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
GROWS		UYOGA		TF	FB	1.00	312.34	14.10	4400
VILCU		TODAY		TF	FB	1.00	115.29	17.84	4400
TODAY	IAF	SOCOP		TF	FB	1.00	070.14	7.08	3900
UYOGA	IAF	SOCOP		TF	FB	1.00	250.32	7.08	3900
SOCOP	IF	REPIE		TF	FB	1.00	160.23	5.96	3100
REPIE	FAF	RW16	MAP	TF	FO	0.30	160.27	4.44	
RW16	MAP	1884 MSL		CA			160.27		
1884 MSL		WUSOB		DF	FO	1.00			4000

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW16

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 4000 DIRECT WUSOB AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. PROFILE STARTS AT SOCOP

3. FAC: 160.27

FAF: REPIE

DIST FAF TO MAP: 4.44

DIST FAF TO THLD: 4.44

4. MIN ALT: SOCOP 3900, REPIE 3100

5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

250 HAT: 0.62

GS ANT:

6. MIN GP INCPT: 3100

GP ALT AT FAF : REPIE

OM:

MM:

IM:

7. GP ANGLE: 3.00

34:1: IS CLEAR

20:1: IS CLEAR

TCH: 52.0

8. MSA FROM: RW16 3700

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -21°C OR ABOVE 54°C.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: FOR INOPERATIVE ALS, INCREASE LNAV/VNAV ALL CATS VISIBILITY TO RVR 5500.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT GROWS ON V542 EASTBOUND.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT VILCU ON V252 NORTHWEST BOUND.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART VDP AT 1.14 NM TO RW16*
*LNAV ONLY
WAAS CHANNEL #66015
REFERENCE PATH ID: W16A
CHART FAS OBST: 1748 ANTENNA 421305N/0755845W.
HOLD S, RT, 340.41 INBOUND
LTP HAE: 465.5 M

MINIMUMS:

TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT

ALTERNATE: NA ☐ STANDARD - NA WHEN LOCAL WEATHER NOT AVAILABLE.

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LPV DA	1884	2400	250	1884	2400	250	1884	2400	250	1884	2400	250			
LNAV/VNAV DA	1984	3000	350	1984	3000	350	1984	3000	350	1984	3000	350			
LNAV MDA	2060	2400	426	2060	2400	426	2060	4000	426	2060	4000	426			
CIRCLING	2120	1	484	2120	1	484	2120	1 1/2	484	2200	2	564			



<u>AIRPORT</u>	<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>ORIGINAL/AMENDMENT</u>	<u>CITY</u>	<u>STATE</u>
GREATER BINGHAMTON/EDWIN A LINK FIELD	KBGM	RNAV (GPS) RWY 16	2	BINGHAMTON	NY

CHANGES - REASONS

1. FEEDER ROUTES FROM GROWS AND VILCU: RNP VALUE CHANGED FROM 2.0 TO 1.0 - RNP VALUE CORRECTED FOR FEEDER SEGMENT PER UPDATED TERPS CRITERIA.
2. GROWS FEEDER: COURSE AND DISTANCE CHANGED FROM 305.41/15.20 TO 312.34/14.10 - UYOGA MOVED 2.08 NM NORTHEAST.
3. VILCU FEEDER: COURSE AND DISTANCE CHANGED FROM 110.90/19.36 TO 115.29/17.84 - TODOY MOVED 2.08 NM SOUTHWEST.
4. TODOY INITIAL: COURSE AND DISTANCE CHANGED FROM 070.17/5.00 TO 070.14/7.08 - TO SUPPORT ATC VECTORS AND MINIMUM LEG LENGTH.
5. UYOGA INITIAL: COURSE AND DISTANCE CHANGED FROM 250.29/5.00 TO 250.32/7.08 - TO SUPPORT ATC VECTORS AND MINIMUM LEG LENGTH.
6. CORRECTED RNP VALUE FROM 0.5 TO 1.0 ON THE INTERMEDIATE SEGMENT - RNP VALUE CORRECTED FOR INTERMEDIATE SEGMENT PER UPDATED TERPS CRITERIA.
7. SOCOPI INTERMEDIATE: DISTANCE CHANGED FROM 6.02 NM TO 5.96 NM - FAF MOVED TO MATCH ILS TCH.
8. FINAL: DISTANCE CHANGED FROM 4.38 NM TO 4.44 NM - FAF MOVED TO MATCH ILS TCH.
9. TERMINAL ROUTES, RW16 (MAP) TO WUSOB CHANGED TO RW16 (MAP) TO 1884 MSL - CA LEG ADDED TO MISSED APPROACH INSTRUCTIONS PER 8260.58A 3-5-2.
10. TERMINAL ROUTE ADDED, 1884 MSL TO WUSOB - DF LEG ADDED TO MISSED APPROACH INSTRUCTIONS PER 8260.58A 3-5-2.
11. PROFILE LINE 3, FAC CHANGED FROM 160.27 TO 160.28, DIST FAF TO MAP AND DIST FAF TO THLD CHANGED FROM 4.38 TO 4.44 - FAF MOVED TO MATCH ILS TCH, REPIE MOVED 320 FT NORTHWEST.
12. PROFILE LINE 7, 34:1 CHANGED TO CLEAR AND 20:1 IS CLEAR ADDED, TCH CHANGED FROM 52.7 TO 52.0 - 34:1 PENETRATION CLEARED, IAW 8260.19H PARA 8-6-7G(3), TO ALIGN WITH THE ILS OR LOC RWY 16 PROCEDURE.
13. PROFILE LINE 8, MSA ALT CHANGED FROM 3600 TO 3700 - NEW CONTROLLING OBSTACLE.
14. NOTE DELETED: DME/DME RNP-0.3 NA - NOTE REPLACED WITH NEW PBN EQUIPMENT REQUIREMENT NOTE.
15. PBN REQUIREMENTS NOTE ADDED: RNP APCH - PER MEMO 257.
16. FAHRENHEIT TEMPS DELETED FROM NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -18C (0F) OR ABOVE 45C (113F) - PER 8260.19H 8-6-9S.
17. CRITICAL LOW BARO-VNAV TEMPERATURE CHANGED FROM -18C TO -21C - 5 YEAR TEMPERATURE HISTORY USED.
18. CRITICAL HIGH BARO-VNAV TEMPERATURE CHANGED FROM 45C TO 54C - PER UPDATED TARGETS EVALUATION.
19. NOTE DELETED: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE ITHACA ALTIMETER SETTING AND INCREASE ALL DA 138 FT AND ALL MDA 140 FT AND INCREASE LNAV/VNAV ALL CATS VISIBILITY 1/2 MILE AND LNAV AND CIRCLING CATS C AND D VISIBILITY 1/4 MILE - PRIMARY ALTIMETER SOURCE LOCAL, ON-AIRPORT AND ON WMSCR.
20. NOTE DELETED: BARO-VNAV NA WHEN USING ITHACA ALTIMETER SETTING - PRIMARY ALTIMETER SOURCE LOCAL, ON-AIRPORT AND ON WMSCR.
21. NOTE DELETED: VDP NA WITH ITHACA ALTIMETER SETTING - PRIMARY ALTIMETER SOURCE LOCAL, ON-AIRPORT AND ON WMSCR.
22. NOTE DELETED: FOR INOPERATIVE MALSR WHEN USING ITHACA ALTIMETER SETTING INCREASE LPV ALL CATS VISIBILITY 1/2 MILE, LNAV CATS A AND B VISIBILITY 1/4 MILE - PRIMARY ALTIMETER SOURCE LOCAL, ON-AIRPORT AND ON WMSCR.
23. PROFILE NOTE CHANGED FROM 'VGSI AND RNAV GLIDEPATH NOT COINCIDENT' TO 'VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET})' - IAW 8260.19H PARA 8-6-9M(2).
24. NOTE DELETED: WHEN VGSI INOP, CIRCLING RWY 34 NA AT NIGHT - NEW EVALUATION ALONG WITH A NEW SURVEY FOUND NO VISUAL SURFACE PENETRATIONS.
25. NOTE CHANGED FROM 'FOR INOPERATIVE MALSR INCREASE LNAV CATS A, C AND D VISIBILITY 1/4 MILE' TO 'FOR INOPERATIVE ALS, INCREASE LNAV/VNAV ALL CATS VISIBILITY TO RVR 5500' - IAW 8260.19H PARA 8-6-11O(3)(D). RVR ADDED WITH NEW AIRPORT SURVEY.
26. PLANVIEW NOTE CHANGED FROM 'PROCEDURE NA FOR ARRIVALS AT VILCU VIA V252 NORTHWEST BOUND AND V428 SOUTHWEST BOUND AND ARRIVAL AT GROWS VIA V542 EASTBOUND, AND V153 SOUTHBOUND' TO 'PROCEDURE NA FOR ARRIVALS AT VILCU ON V252 NORTHWEST BOUND' AND 'PROCEDURE NA FOR ARRIVALS AT GROWS ON V542 EASTBOUND' - UPDATED EVALUATION.
27. NOTE DELETED: VISIBILITY REDUCTION BY HELICOPTERS NA - OUTDATED NOTE, 34:1 AND 20:1 PENETRATIONS CLEAR.
28. ADDITIONAL FLIGHT DATA, FAS OBST CHANGED FROM 1799 TREE 421312N/0755842W TO 1748 ANTENNA 421305N/0755845W - UPDATED FAS OBSTACLE WITH NEW TARGETS EVALUATION.
29. ADDITIONAL FLIGHT DATA, NOTE ADDED: CHART CIRCLING ICON - NEW CIRCLING CRITERIA APPLIED.
30. ADDITIONAL FLIGHT DATA, NOTE CHANGED FROM 'CHART VDP AT 1.15 NM TO RW16' TO 'CHART VDP AT 1.14 NM TO RW16' - UPDATED TARGETS EVALUATION.
31. LPV MINIMA CHANGED FROM 3/4 VIS TO RVR 2400 - RVR ADDED WITH NEW AIRPORT SURVEY.
32. LNAV/VNAV MINIMA CHANGED FROM 3/4 VIS TO RVR 3000 - RVR ADDED WITH NEW AIRPORT SURVEY.
33. LNAV CATS A-C MINIMA CHANGED FROM 3/4 VIS AND CAT D FROM 1 SM TO CATS A-B RVR 2400 RVR AND CATS C-D 4000 RVR - RVR ADDED WITH NEW AIRPORT SURVEY.
34. FAS DATA: LTP CHANGED FROM 421305.0795N/0755909.1285W TO 421305.0855N/0755909.1335W - NEW VG SURVEY.
35. FAS DATA: FPAP CHANGED FROM 421208.7700N/0755822.3700W TO 421149.2365N/0755806.1625W - NEW TARGETS EVALUATION.
36. FAS DATA: COURSE WIDTH AT THRESHOLD CHANGE FROM 94.25 TO 106.75 - NEW TARGETS EVALUATION.
37. FAS DATA: 648M LENGTH OFFSET ADDED - NEW TARGETS EVALUATION
38. FAS DATA: CRC REMAINDER CHANGED FROM B14FOA37 TO 32F21D8B.



AIRPORT

GREATER BINGHAMTON/EDWIN A LINK
FIELD

AIRPORT ID

KBGM

PROCEDURE NAME

RNAV (GPS) RWY 16

ORIGINAL/AMENDMENT

2

CITY

BINGHAMTON

STATE

NY

COORDINATED WITH:

A4A ☒ **ALPA** ☒ **AOPA** ☒ **APA** ☒ **HAI** ☐ **NBAA** ☒ **OTHER:** ZNY, ZBW, BGM TOWER, BGM APP CON, AMGR

FLIGHT CHECKED BY

STEPHEN BAUER

Digitally signed by

WARDELL HENNING

Jul 30, 2020

OFFICE

FICO

DATE

7/29/2020

DEVELOPED BY

ANDREA CHANEY *Digitally signed by*
ANDREA J CHANEY

Digitally signed by

Jan 31, 2020

OFFICE

AJV-A433

DATE

11/18/2019

APPROVED BY

GEORGE DAVIS

Digitally signed by

WARDELL HENNING

Jul 30, 2020

OFFICE

AJV-A430

DATE

TITLE

MANAGER



<u>AIRPORT</u>	<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>ORIGINAL/AMENDMENT</u>	<u>CITY</u>	<u>STATE</u>
GREATER BINGHAMTON/EDWIN A LINK FIELD	KBGM	RNAV (GPS) RWY 16	2	BINGHAMTON	NY

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KBGM
RUNWAY	RW16
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W16A
LTP/FTP LATITUDE	421305.0855N
LTP/FTP LONGITUDE	0755909.1335W
LTP/FTP ELLIPSOIDAL HEIGHT	+04655
FPAP LATITUDE	421149.2365N
FPAP LONGITUDE	0755806.1625W
THRESHOLD CROSSING HEIGHT (TCH)	00052.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0648
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	32F21D8B

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K6
LTP ORTHOMETRIC HEIGHT	+04980
FPAP ORTHOMETRIC HEIGHT	+04980



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD

AIRPORT	AIRPORT ID	PROCEDURE NAME	AMDT NO.	CITY	STATE	AIRPORT ELEVATION	FACILITY
GREATER BINGHAMTON/EDWIN A LINK FIELD	KBGM	RNAV (GPS) RWY 16	2	BINGHAMTON	NY	1636	RNAV

PART A: OBSTRUCTION DATA SEGMENTS

FEEDER

FROM
GROWS

TO
UYOGA

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>			<u>HMAS</u>				
	14.10										
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
1.AAO	422518.00N/0755327.00W	1857	164	98	4E	2000				AT543	4400
2.TERRAIN	422518.00N/0755327.00W	1657 (1700)								AS1500	3200

COMPUTATIONS

ALT	KIAS	KTAS	HAA	VKTW	TR	BA	DTA	COURSE CHANGE	DVEB	VEB OCS	RF CENTER FIX/DISTANCE
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SEGMENT REMARKS:

FEEDER

FROM
VILCU

TO
TODDY

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>			<u>HMAS</u>				
	17.84										
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
3.AAO	422309.00N/0764009.00W	2343	164	98	4E	2000					4400
4.TERRAIN	422033.00N/0763836.00W	1968 (2000)								AS1500	3500

COMPUTATIONS

ALT	KIAS	KTAS	HAA	VKTW	TR	BA	DTA	COURSE CHANGE	DVEB	VEB OCS	RF CENTER FIX/DISTANCE
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SEGMENT REMARKS:



AIRPORT GREATER BINGHAMTON/EDWIN A LINK FIELD	AIRPORT ID KBGM	PROCEDURE NAME RNAV (GPS) RWY 16	AMDT NO. 2	CITY BINGHAMTON	STATE NY	AIRPORT ELEVATION 1636	FACILITY RNAV				
INITIAL											
FROM TODAY				TO SOCOP							
RNP	DISTANCE 7.08	PAT	MAP	HAT		HMAS					
OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
5.TOWER (36-000308)	422037.00N/0760704.00W	1978	50	20	2C	1000				AT922	3900
6.TERRAIN	421651.00N/0761257.00W	1723 (1700)								AS1500	3200

COMPUTATIONS											
ALT	KIAS	KTAS	HAA	VKTW	TR	BA	DTA	COURSE CHANGE	DVEB	VEB OCS	RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

INITIAL											
FROM UYOGA				TO SOCOP							
RNP	DISTANCE 7.08	PAT	MAP	HAT		HMAS					
OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
7.AAO	422257.00N/0760621.00W	1867	164	98	4E	1000				AT1033	3900
8.TERRAIN	422257.00N/0760621.00W	1667 (1700)								AS1500	3200

COMPUTATIONS											
ALT	KIAS	KTAS	HAA	VKTW	TR	BA	DTA	COURSE CHANGE	DVEB	VEB OCS	RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



INTERMEDIATE

FROM
SOCOP

TO
REPIE

RNP	DISTANCE 5.96	PAT	MAP	HAT			HMAS					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
5.TOWER (36-000308)	422037.00N/0760704.00W		1978	50	20	2C	500				AT622	3100
9.TERRAIN	422112.00N/0760848.00W		1699 (1700)								AS1000	2700

COMPUTATIONS	ALT	KIAS	KTAS	HAA	VKTW	TR	BA	DTA	COURSE CHANGE	DVEB	VEB OCS	RF CENTER FIX/DISTANCE
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SEGMENT REMARKS:

FINAL: LPV

FROM
REPIE

TO
RW16

RNP	DISTANCE 4.44	PAT	MAP DA	HAT 250			HMAS					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
10.SIGN (36-151890)	421306.76N/0755911.96W		1637	20	3	1A		34:1				1884

COMPUTATIONS	ALT	KIAS	KTAS	HAA	VKTW	TR	BA	DTA	COURSE CHANGE	DVEB	VEB OCS	RF CENTER FIX/DISTANCE
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SEGMENT REMARKS:



FINAL: LNAV/VNAV

FROM

REPIE

TO

RW16

RNP	DISTANCE	PAT	MAP	HAT			HMAS					
	4.44		DA		350							
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
11.ANTENNA (36-151863)	421304.84N/0755844.77W		1748	20	3	1A	161				XP75	1984

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

XP75: TO RETAIN PUBLISHED DA.

FINAL: LNAV

FROM

REPIE

TO

RW16

RNP	DISTANCE	PAT	MAP	HAT			HMAS					
	4.44		RW16		426							
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
11.ANTENNA (36-151863)	421304.84N/0755844.77W		1748	20	3	1A	250				DG62	2060

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



MISSED APPROACH : LPV

FROM

DA

TO

WUSOB

RNP	DISTANCE	PAT	MAP	HAT			HMAS 1696					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
								ASC				4000
12.AAO	415942.00N/0755018.00W		1992	164	98	4E	1000					3000
13.TERRAIN	420021.00N/0755042.00W		1751 (1800)								AS1500	3300

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

MISSED APPROACH : LNAV/VNAV

FROM

DA

TO

WUSOB

RNP	DISTANCE	PAT	MAP	HAT			HMAS 1823					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
								ASC				4000
12.AAO	415942.00N/0755018.00W		1992	164	98	4E	1000					3000
13.TERRAIN	420021.00N/0755042.00W		1751 (1800)								AS1500	3300

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



MISSED APPROACH : LNAV

FROM

RW16

TO

WUSOB

RNP	DISTANCE	PAT	MAP	HAT			HMAS 1960					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
								ASC				4000
12.AAO	415942.00N/0755018.00W		1992	164	98	4E	1000					3000
13.TERRAIN	420021.00N/0755042.00W		1751 (1800)								AS1500	3300

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

CIRCLING

☐ ALL CATS

☒ CAT A

☒ CAT B

☒ CAT C

☒ CAT D

☐ CAT E

☐ NOT AUTHORIZED

OBSTRUCTION	COORDINATES	RADIUS	HAA	ELEV MSL	HORZ	VERT	AC	ROC	OCS	ADJUSTMENTS	MIN ALT
CATEGORY A											
14.TREE	421101.72N/0755910.84W	1.32	484	1819	50	20	2C	300			2120
CATEGORY B											
14.TREE	421101.72N/0755910.84W	1.86	484	1819	50	20	2C	300			2120
CATEGORY C											
14.TREE	421101.72N/0755910.84W	2.93	484	1819	50	20	2C	300			2120
CATEGORY D											
14.TREE	421101.72N/0755910.84W	3.84	564	1819	50	20	2C	300		HAA	2200

CIRCLING REMARKS:



MSA

CENTER

RW16

RADIUS

25

SECTOR	OBSTRUCTION	COORDINATES	BEARING	DISTANCE	ELEV MSL	HORZ	VERT	AC	ROC	OCS	ADJUSTMENTS	MIN ALT
360-360	TOWER (36-159657)	420340.27N/0755644.21W	181	09.6	2657	250	50	4D	1000			3700

MSA REMARKS:

NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:



PART B: SUPPLEMENTAL DATA

COMMUNICATIONS WITH
ZNY ARTCC, ZBW ARTCC, BGM TOWER, BGM APP CON

<u>WX SERVICE</u> ASOS	<u>LOCATION</u> KBGM	<u>HRS OPERATION</u> 24	<u>ALTIMETER SOURCE</u> KBGM	<u>DISTANCE</u> 0	<u>SERVICE-A</u> Y	<u>ADJUSTMENTS</u> 0
<u>BACK-UP WX SERVICE</u> AWOS	<u>LOCATION</u> KITH	<u>HRS OPERATION</u> 24	<u>ALTIMETER SOURCE</u> KITH	<u>DISTANCE</u> 27.21	<u>SERVICE-A</u> Y	<u>ADJUSTMENTS</u> 138

WX REMARKS:
RASS PRESSURE PATTERNS THE SAME KBGM 1635.6, KITH 1099.0, RA = 137.79.

<u>PRIMARY NAVAID</u>	<u>MONITOR POINT</u>	<u>HRS OPERATION</u>	<u>CAT</u>
<u>APPROACH AND RUNWAY LIGHTING SYSTEM</u>		<u>RUNWAY MARKINGS</u>	<u>RUNWAY VISUAL RANGE</u>
RW		H-G	
RW10 - MIRL (PCL), VASI-4L		NPI-G	
RW28 - MIRL (PCL), REIL, VASI-4L		NPI-G	
RW16 - MALSR (PCL), HIRL (PCL), PAPI-2L		PIR-G	APPROACH, ROLL OUT
RW34 - MALSR (PCL), HIRL (PCL), PAPI-2L		PIR-G	APPROACH, ROLL OUT

<u>GLIDESLOPE ANGLE</u> 3.00	<u>ELEV RWY THRESHOLD</u> 1633.8	<u>TCH</u> 52.0	<u>ELEV GS ANTENNA</u>	<u>DISTANCE FROM RWY</u>	<u>VGSI ANGLE</u> 3.00	<u>TCH</u> 61.3
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<u>FINAL APPROACH COURSE AIMING</u>			
RUNWAY THRESHOLD	<input checked="" type="checkbox"/>	FT FROM THRESHOLD	DISPLACED THRESHOLD DISTANCE 400
ON CENTERLINE	<input checked="" type="checkbox"/>	FT FROM CENTERLINE	

<u>CRITICAL TEMPERATURES</u>			
<u>CRITICAL LOW</u> -21C	<u>CRITICAL HIGH</u> +54C	<u>ACT</u> -21C	<u>APT ISA</u> +11.76C

CRITICAL TEMPERATURE REMARKS:
AVERAGE COLD TEMPERATURE DERIVED FROM 5-YEAR HISTORY (2014-2018).
CRITICAL LOW TEMPERATURE BASED ON EFFECTIVE GPA.
DESCENT RATE (FPM): STANDARD TEMP 977 HIGH TEMP 1289.



"VISUAL PORTION OF FINAL" PENETRATIONS

Final Type	LPV, LNAV/VNAV, LNAV
20:1	
1637 SIGN (36-151890) 421306.76N/0755911.96W (0.4)	
Final Type	LPV, LNAV/VNAV, LNAV
34:1	
1637 SIGN (36-151890) 421306.76N/0755911.96W (0.4)	

HELICOPTER 'VISUAL PORTION OF FINAL' PENETRATIONS

and/or
5280-FT "PROCEED VFR" SEGMENT LEVEL SURFACE AREA PENETRATIONS

PART C: GENERAL REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

120 FT VEGETATION USED PER FPT.

TAAS NOT DEVELOPED PER FPT.

20:1 AND 34:1 PENETRATION: OBSTACLE IS A SIGN AT THE END OF RWY 16 AND IS FIXED BY FUNCTION.

WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE ITHACA ALTIMETER SETTING AND INCREASE ALL LPV DA TO 2022 FT AND VISIBILITY ALL CATS TO RVR 3500. INCREASE LNAV/VNAV DA TO 2122 FT AND INCREASE VISIBILITY ALL CATS TO RVR 5000. INCREASE ALL LNAV MDA 140 FT AND LNAV CATS C/D VISIBILITY 1/2 SM. INCREASE ALL CIRCLING MDA 140 FT AND CIRCLING CATS C/D VISIBILITY 1/4 SM.

FOR INOPERATIVE ALS, WHEN USING ITHACA ALTIMETER SETTING, INCREASE LPV ALL CATS VISIBILITY TO RVR 6000, LNAV/VNAV ALL CATS VISIBILITY TO 1 3/8 SM AND LNAV CATS C AND D VISIBILITY TO 1 5/8 SM.

BARO-VNAV AND VDP NA WHEN USING ITHACA ALTIMETER SETTING.

ORDER 8260.3, VOLUME 1, CHAPTER 2, NEW CIRCLING CRITERIA APPLIED.



PART D: AIRSPACE

DOCKET #

ALL DISTANCES TO 1/100NM; ELEVATION TO NEAREST 100 FEET; COORDINATES TO 1/100 SECOND; DEG TO 1/100 DEGREE

DISTANCE FROM	THLD	TO 1000FT POINT	2.87
WIDTH OF	FINAL	SEGMENT AT 1000FT POINT	1.20
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1000FT POINT	148.27
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1000FT POINT	1600
DISTANCE FROM	THLD	TO 1500FT POINT	8.00
WIDTH OF	INTERMEDIATE	SEGMENT AT 1500FT POINT	4.00
TRUE COURSE OF	INTERMEDIATE	SEGMENT CONTAINING 1500FT POINT	148.23
HIGH TERRAIN IN	INTERMEDIATE	SEGMENT CONTAINING 1500FT POINT	1700

THRESHOLD
COORDINATES
(IF STR-IN)421305.09N/0755909.13W

ARP COORDINATES421230.40N/0755846.60W

RUNWAY APCH END
AND DIST FURTHEST
FROM ARPRUNWAY 16 DISTANCE 0.71 NM

FAF
COORDINATES421651.84N/0760217.69W

FIX NAME
COORDINATES

REMARKS
THLD DISPLACED 400FT, ACTUAL COORDINATES: 421308.45N/0755911.93W.



